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10/699,529	10/31/2003	Robert H. Wollenberg	T-6298 (538-59)	2770

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EXAMINER

WALLENHORST, MAUREEN

ART UNIT	PAPER NUMBER
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1743

MAIL DATE	DELIVERY MODE
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09/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/699,529

Applicant(s)

WOLLENBERG ET AL.

Examiner

Maureen M. Wallenhorst

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 20 and 22-23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 13-14 and 21 of copending Application No. 10/699,510. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims recite a method for producing a combinatorial library of different lubricating oil compositions by combining a major amount of a base oil of lubricating viscosity with a minor amount of an oil additive to form a plurality of lubricating oil composition samples, and placing the samples in a plurality of test

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reservoirs. In addition, both sets of claims recite analyzing the lubricating oil composition samples for property data.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 20 and 22-30 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 13-18, 20-22 and 33-38 of copending Application No. 10/699,507. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims recite a method for producing and screening lubricating oil additive compositions comprising the steps of providing a plurality of lubricating oil additive compositions, each containing a major amount of a base oil of lubricating viscosity and a minor amount of an oil additive, measuring composition property data such as the storage stability of the samples, and outputting the results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 20, 22-24 and 26-30 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 and 10-14 of copending Application No. 10/699,508. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims recite a method for producing and screening lubricating oil additive compositions comprising the steps of providing a plurality of lubricating oil additive compositions, each containing a major amount of a base oil of lubricating viscosity and a minor amount of an oil additive, measuring composition property data such as the oxidation stability of the samples, and outputting the results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1 and 17-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 34 of copending Application No. 10/779,422. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims recite a combinatorial lubricating oil composition library comprising a plurality of different lubricating oil compositions, each containing a major amount of a base oil of lubricating viscosity and a minor amount of an oil additive, and property data of the compositions such as deposit formation.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-2, 8-10, 16-26 and 31-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Kolosov et al (US 2004/0123650).

Kolosov et al teach of a high throughput testing method and apparatus for the screening of a library of material samples. The method and apparatus involve combinatorial chemistry that refers to the synthesis of a collection of diverse materials, and the screening of the materials for desirable performance characteristics and properties. The combinatorial approach can

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effectively evaluate much larger numbers of diverse compounds in a much shorter period of time. The apparatus taught by Kolosov et al includes a plurality of samples supported in wells on a substrate. Kolosov et al teach that the invention can be used to screen libraries of any flowable material that may be a commercial product itself or may be a portion of a commercial product. Exemplary commercial products that can be tested with the apparatus taught by Kolosov et al include lubricants and oils. The invention can be used to analyze the resulting properties of a particular flowing material, and to analyze the relative or comparative effects that an additive has upon a particular flowable material. Additives in a flowable material to be tested include a detergent, a flow modifier, etc. See paragraph nos. 0042-0043 in Kolosov et al. The screening for the effects of different additives upon the characteristics of a flowing material is performed by measuring various properties of the material samples present in the wells on the substrate. Properties measured include the viscosity, the density, the thermal degradation, the aging characteristics, the chemical composition and the agglomeration or sedimentation of the material samples. See paragraph no. 0065 in Kolosov et al. Once the characterizing properties of the samples are determined, the results may be mathematically combined in various combinations to provide figures of merit for the properties of interest. See paragraph no. 0066 in Kolosov et al. The sample size of each sample in the wells on the substrate is typically no greater than about 20 ml, more preferably no greater than about 5 ml, and most preferred, no greater than about 0.5 ml. See paragraph no. 0054 in Kolosov et al. To form an array of samples on the substrate, Kolosov et al teach that the samples and additives are dispensed into the wells with any suitable dispensing apparatus (i.e. an automated micropipette or capillary dispenser). The dispensing apparatus may have a heated tip, thus providing heating of the samples. Each sample

is dispensed to an individually addressable region in the substrate. See paragraph no. 0053 in Kolosov et al. The plurality of samples can vary in number depending upon the intended use of the method, and the plurality of samples can form a library. A library comprises an array of two or more different samples spatially separated on a common substrate. Candidate samples within a library may differ in a definable and predefined way, such as in chemical structure, processing, mixtures of interacting components, the relative amounts of the components, the presence of additives and other reactant materials, etc. The samples are spatially separated on the substrate such that an array of samples is separately addressable for characterization thereof. The two or more samples can reside in separate containers formed as wells in a surface of a substrate or can be simply dispensed onto a common planar substrate. See paragraph no. 0057 in Kolosov et al. The apparatus taught by Kolosov et al comprises a stimulus generator 12 that applies power to a probe 14 for applying a stimulus to one or more samples 16 in the array or library of samples. The apparatus also includes a sensor or transducer 20 for monitoring a response of one or more of the samples 16 to the stimulus. The transducer 20 and the stimulus generator 12 are both in communication with a computer sub-system 23 such as a microprocessor or other computer for manipulating data. The computer sub-system 23 may be employed to receive and store data such as responses of samples 16, material properties of samples, etc. Additionally, the computer sub-system may be employed to command other components of the system such as the stimulus generator and the dispensing means, as well as to correlate responses of samples 16 to their respective material properties. See paragraph nos. 0067-0068 in Kolosov et al. The probe 14 may be translated, rotated, reciprocated or oscillated within the samples so as to mix the samples and subject them to different forces. See paragraph no. 0070 in Kolosov et al. For contacting the

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probe 14 and dispensing means with the samples 16, the samples may be moved relative to the probe 14, or alternatively, the probe 14 may be moved relative to the samples 16. Combinations of these motions may also occur serially or simultaneously. An automated system may be used to move the one or more probes and the dispensing means serially or simultaneously to the various samples of a library. A suitable automated system is a robotic system such as an XYZ robot arm that has a multiple axis range of motion such as in the orthogonal X, Y, and Z coordinate axes system. This automated system is part of or in communication with the computer sub-system 23. See paragraph nos. 0073-0074 in Kolosov et al. Kolosov et al also teach that a plurality of control samples having known material properties are also monitored in the libraries along with the samples so that the responses of the samples can be compared with the known material properties of the controls. The responses of the samples in the library can be related to the known material properties by a mathematical relationship.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 3-7 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolosov et al. For a teaching of Kolosov et al, see previous paragraphs in this Office action.

Kolosov et al fail to teach that the lubricant oil flowable materials containing an additive therein have the same kinematic viscosities as recited in instant claims 3-7. However, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to formulate the lubricant oil flowable materials taught by Kolosov et al to have the same kinematic viscosities as recited in instant claims 3-7 so as to make them suitable for a particular intended use, and since the kinematic viscosities of the compositions depend upon the choice of base oil and additive combined together.

12. Claims 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolosov et al in view of Smrcka et al. For a teaching of Kolosov et al, see previous paragraphs in this Office action. Kolosov et al fail to teach that the results of testing can be stored in a data carrier or transmitted to a remote location.

Smrcka et al teach of a system and method for managing information pertaining to new product development. The method comprises the steps of testing a new chemical product, and storing the results in a data carrier such as a computer readable medium. All the data obtained through testing of a chemical product is stored in a central database. Remote access to the database is available globally from any personal computer having suitable client software installed and suitable network connectivity. See paragraph nos. 0011 and 0038 in Smrcka et al.

Based upon the combination of Kolosov et al and Smrcka et al, it would have been obvious to one of ordinary skill in the art to store the results of testing the lubricating compositions in the library taught by Kolosov et al in a data carrier that is available from a

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remote access site since Smrcka et al teach that it is advantageous to store the results of testing for products being newly developed on a computer readable data carrier that is available from a remote access site in order to share and disseminate the information concerning the new product to anyone in the world researching that product.

13. Applicant's arguments filed June 15, 2007 have been fully considered but they are not persuasive.

The previous provisional rejections of the claims under the judicially created doctrine of obviousness-type double patenting made in the Office action mailed on March 13, 2007 are maintained since Applicants have not sufficiently amended the claims nor filed the appropriate terminal disclaimers in order to overcome these rejections.

Applicants argue that Kolosov et al fails to teach or suggest a method for producing a combinatorial lubricating oil composition library comprising providing a plurality of different lubricating oil composition samples comprising a major amount of at least one base oil of lubricating viscosity and a minor amount of at least one lubricating oil additive, measuring properties of each sample in the library to provide lubricating oil composition property data, and outputting the results. Applicants argue that there is no teaching in Kolosov et al of lubricating oil composition samples that contain additives therein, and lubricating oil compositions can be concentrates that contain a major amount of an additive and a minor amount of a base oil, rather than a major amount of a base oil of lubricating viscosity and a minor amount of an additive. Applicants argue that at no point do Kolosov et al provide any disclosure that a lubricant can be a base oil of lubricating viscosity for use in a lubricating oil composition having a minor amount of an additive therein.

In response to Applicants' arguments, it is reiterated that in the description by Kolosov et al "of *most* any flowable material that may be a commercial product itself or an ingredient within a commercial product" being a candidate for screening in the combinatorial library, there is no specific exclusion of lubricating oil composition samples having a major amount of a base oil of lubricating viscosity and a minor amount of an additive therein. In addition, even though there are lubricating oil compositions that are concentrates containing a major amount of a lubricating oil additive and a minor amount of a base oil of lubricating viscosity as a diluent for the concentrate, there are many commercial products such as automotive/marine lubricating oil compositions having a major amount of a base oil of lubricating viscosity and a minor amount of an additive therein. As evidence of this, see the previously relied upon reference to Carey et al that teaches of various commercial lubricating oil compositions used in the marine industry having a major amount of a base oil and a minor amount of an additive therein. Therefore, the broad teaching of Kolosov et al including the analysis of most any flowable material that is a commercial product encompasses both kinds of lubricating oil compositions—those that are concentrates having only a minor amount of a base oil therein and those commercial products that contain a major amount of a base oil and a minor amount of an additive, such as those commercial products taught by Carey et al. The entire disclosure of the Kolosov et al reference is considered prior art, including all embodiments under the broad teaching of lubricant oil commercial products. Without any evidence to the contrary, there is no basis to say that lubricating oil compositions containing a major amount of a base oil of lubricating viscosity and a minor amount of an additive cannot be analyzed in the combinatorial screening system taught by Kolosov et al.

In further response to Applicants' argument, an additive, by definition, means any substance incorporated into a base material, usually in a low concentration, to perform a specific function (i.e. a stabilizer, a preservative, dispersing agent, antioxidant, etc.). See page 20 of the Condensed Chemical Dictionary as an attachment hereto. Since Kolosov et al teach that a lubricant oil can be analyzed having an additive therein as one of the embodiments of the invention (see paragraph nos. 0042-0043 of Kolosov et al), and one embodiment of an additive in a composition is a substance incorporated into a base material in a low concentration, the teaching of Kolosov et al encompasses the recitation of instant claim 1 reciting a major amount of at least one base oil of lubricating viscosity and a minor amount of at least one lubricating oil additive.

In response to Applicants' request for the Examiner to point out with particularity the column and line numbers in Kolosov where it teaches of lubricating oil compositions containing a major amount of at least one base oil of lubricating viscosity and a minor amount of at least one lubricating oil additive, it is noted that Kolosov discloses that the invention may be used to screen or test flowable materials such as lubricants (p. 4, para. 42). The invention disclosed in Kolosov has particular utility in connection with the screening of a number of different material forms including oils (p. 4, para. 43). The Kolosov invention can be used to analyze the resulting properties of a particular flowable material or the relative or comparative effects that an additive has upon a particular flowable sample material, i.e. the effect of a detergent, a flow modifier or the like (p.4, para. 43), and as pointed out above, an additive is defined as any substance incorporated into a base material, usually in low concentrations to perform specific functions. In

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addition, Kolosov teaches of a combinatorial library of product mixtures, wherein the product mixtures are varied with respect to additives and their concentrations (p. 7, para. 61).

Applicants fail to argue the rejection of the claims under 35 USC 103 based upon Kolosov et al and Smrcka et al other than to state that this additional reference does not cure the deficiencies as noted above with regards to Kolosov et al. Since Applicants' arguments with regards to Kolosov et al have been addressed above, no further comment on this reference or the secondary reference to Smrcka et al will be provided.

For all of the above reasons, Applicants' arguments are not found persuasive.

14. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maureen M. Wallenhorst whose telephone number is 571-272-1266. The examiner can normally be reached on Monday-Thursday from 6:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden, can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Maureen M. Wallenhorst
Primary Examiner
Art Unit 1743

mmw

August 21, 2007

Maureen M. Wallenhorst
MAUREEN M. WALLENHORST
PRIMARY EXAMINER
GROUP ~~1300~~ 1700